

HIGH RETENTION CONNECTION

ABSTRACT

An electrical spring connection assembly electrically connects a conducting case, and a spark plug. The electrical spring connection assembly includes a base having a securing aperture for receiving the conducting case therein. The base fixedly secures the electrical spring connection assembly within the conducting case. The electrical spring connection assembly also includes a leaf spring portion that extends radially out from the base for receiving the spark plug therein. The leaf spring portion creates an engagement force the spark plug must overcome to be positioned within the electrical spring connection assembly. The electrical spring connection assembly also includes a beam spring portion extending out from the leaf spring portion. The beam spring portion creates a retention force to retain the spark plug within the electrical spring connection assembly. The retention force is greater than the engagement force.